WHAT IS CLAIMED IS:

1. A method for implementing a speckle reduction filter comprising:

receiving a processed data stream from a processor;

dividing the processed data stream into data subsets;

simultaneously filtering the data subsets by using a speckle reduction filter to produce filtered data subsets; and

producing an image data stream based on the filtered data subsets.

2. A method in accordance with claim 1 further comprising:

displaying the image data stream as a filtered image on a screen.

3. A method in accordance with claim 1 further comprising:

increasing a range over which values of data included in the image data stream are distributed to improve contrast of a filtered image generated from the image data stream.

4. A method in accordance with claim 1 further comprising:

simultaneously co-displaying a filtered image and an original unfiltered image on a common screen, wherein the filtered image is generated from the image data stream and the original unfiltered image is generated from the processed data stream.

5. A method in accordance with claim 1 further comprising:

using frame averaging in conjunction with the method.

6. A method in accordance with claim 1 wherein the filtering step is based on adjustable parameters, the method further comprising:

changing values of the parameters between first and second value sets to form a first and second image data streams; and

simultaneously co-displaying a first image and a second image on a common screen, wherein the first image is generated from the first image data stream, and wherein the second image is generated from the second image data stream.

7. A method in accordance with claim 1 further comprising:

simultaneously co-displaying, in a dual display mode, a filtered image and an original unfiltered image on a common screen, wherein the filtered and the original unfiltered images are reconstructed from a data set that includes the image data stream and the processed data stream; and

enabling a user to enter the dual display mode during one of a scan, a replay of pre-recorded cine loops, and a display of a still image that is not updated periodically.

8. A method in accordance with claim 1 wherein the filtering step is based on adjustable parameters, the method further comprising:

providing a set of controls to a user to adjust the parameters of the speckle reduction filter.

9. A method in accordance with claim 1 wherein the filtering step is based on adjustable parameters, the method further comprising:

automatically, without user intervention, optimizing the parameters based on an application and a scan of an imaging system.

10. A method in accordance with claim 1 wherein the filtering step is based on adjustable parameters, the method further comprising:

enabling a user to adjust the parameters during one of a scan, a replay of recorded scans, and a display of a still image.

11. A method in accordance with claim 1 wherein any two of the data subsets have common data, the method further comprising:

combining the data subsets to form a filtered image data stream; and

eliminating a portion of the common data present in any two of the data subsets while combining the data subsets to form the filtered image data stream.

12. A method in accordance with claim 1 further comprising:

performing one of frequency compounding and spatial compounding of beams that are a combination of echo signals before receiving the processed data stream.

13. A method in accordance with claim 1 further comprising:

using the method in conjunction with a computer-aided diagnosis (CAD) algorithm.

14. A method for implementing a speckle reduction filter comprising:

receiving beams from a beamformer;

frequency compounding the beams to obtain a filtered image data stream;

receiving a processed data stream from a processor;

dividing the processed data stream into data subsets;

simultaneously filtering the data subsets by using a speckle reduction filter to produce filtered data subsets;

producing a second image data stream based on the filtered data subsets; and

simultaneously co-displaying a filtered image and a second image on a common screen, wherein the filtered image is generated from the filtered image data stream and the second image is generated from the second image data stream.

15. A computer-readable medium encoded with a program configured to:

receive a processed data stream from a processor;

divide the processed data stream into data subsets;

simultaneously filter the data subsets by using a speckle reduction filter to produce filtered data subsets; and

produce an image data stream based on the filtered data subsets.

16. A computer-readable medium in accordance with claim 15 wherein the program is further configured to:

instruct a display device to display the image data stream as a filtered image on a screen.

17. A computer-readable medium in accordance with claim 15 wherein the program is further configured to:

increase a range over which values of data included in the image data stream are distributed to improve contrast of a filtered image generated from the image data stream.

18. A computer-readable medium in accordance with claim 15 wherein the program is further configured to:

simultaneously co-display a filtered image and an original unfiltered image on a common screen, wherein the filtered image is generated from the image data stream and the original unfiltered image is generated from the processed data stream.

19. A computer-readable medium in accordance with claim 15 wherein the program is further configured to:

apply frame averaging in conjunction with the method.

20. A computer programmed to:

receive a processed data stream from a processor;

divide the processed data stream into data subsets;

simultaneously filter the data subsets by using a speckle reduction filter to produce filtered data subsets; and

produce an image data stream based on the filtered data subsets.

21. An ultrasound imaging system comprising:

a transducer array;

a beamformer;

a processor for processing a receive beam from the beamformer;

a scan converter and display controller operationally coupled to the transducer array, the beamformer, and the processor, the scan converter and display controller configured to:

receive a processed data stream from the processor;

divide the processed data stream into data subsets;

simultaneously filter the data subsets by using a speckle reduction filter to produce filtered data subsets; and

produce an image data stream based on the filtered data subsets.

22. An ultrasound imaging system in accordance with claim 21 wherein the scan converter and display controller is further configured to:

simultaneously co-display a filtered image and an original unfiltered image on a common screen, wherein the filtered image is generated from the image data stream and the original unfiltered image is generated from the processed data stream, wherein the filtered image is one of a 2-dimensional and a 3-dimensional image.

23. An ultrasound imaging system in accordance with claim 21 wherein the scan converter and display controller includes more than one central processing unit (CPU), wherein each CPU simultaneously processes a data subset of the image data stream.

24. An ultrasound imaging system in accordance with claim 21 wherein the scan converter and display controller includes a central processing unit (CPU) that simultaneously processes the data subsets of the image data stream.

25. An ultrasound imaging system in accordance with claim 21 wherein the ultrasound imaging system scans in one of a fundamental mode, a harmonic mode, a color flow mode, a power Doppler imaging (PDI) mode, a contrast mode, and a B-flow mode to obtain echo signals reflected from an object under examination.